

Urinary Retention in Postoperative Patients with Scopolamine Patches

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Background

4KS patients with a scopolamine patch were experiencing increased length of stay related to urinary retention.

- **Scopolamine**
 - An anti-cholinergic often used to prevent post-operative nausea
 - Urinary retention is a known potential side effect
- **LVHN Urinary Retention Policy**
 - Patients have 8 – 10 hours to spontaneously void after Foley catheter removal
 - If unable to void spontaneously, the patient is straight catheterized
 - After three straight catheterizations 6-8 hours apart, a Foley catheter is placed
- Each time a patient is catheterized, they are made susceptible to infection

PICO

- In postoperative patients, how does the use of scopolamine patches compared to no scopolamine patches affect urinary retention?
 - P: postoperative patients
 - I: removal of scopolamine patch after first catheterization
 - C: no patch
 - O: decreased urinary retention

Evidence

- Higher perioperative exposure to anti-cholinergic medications significantly increases the risk of failed postoperative voiding (Walter, Dieter, Siddiqui, Weidner, & Wu, 2014)
- Transdermal scopolamine is not a risk factor for acute postoperative urinary retention after pelvic reconstructive procedures (Propst, O'Sullivan, & Tulikangas, 2016)
- In the present large cohort of general surgical patients, the prevalence of post-operative urinary retention was approximately 5%. (Dreijer, Moller, & Bartholdy, 2011)

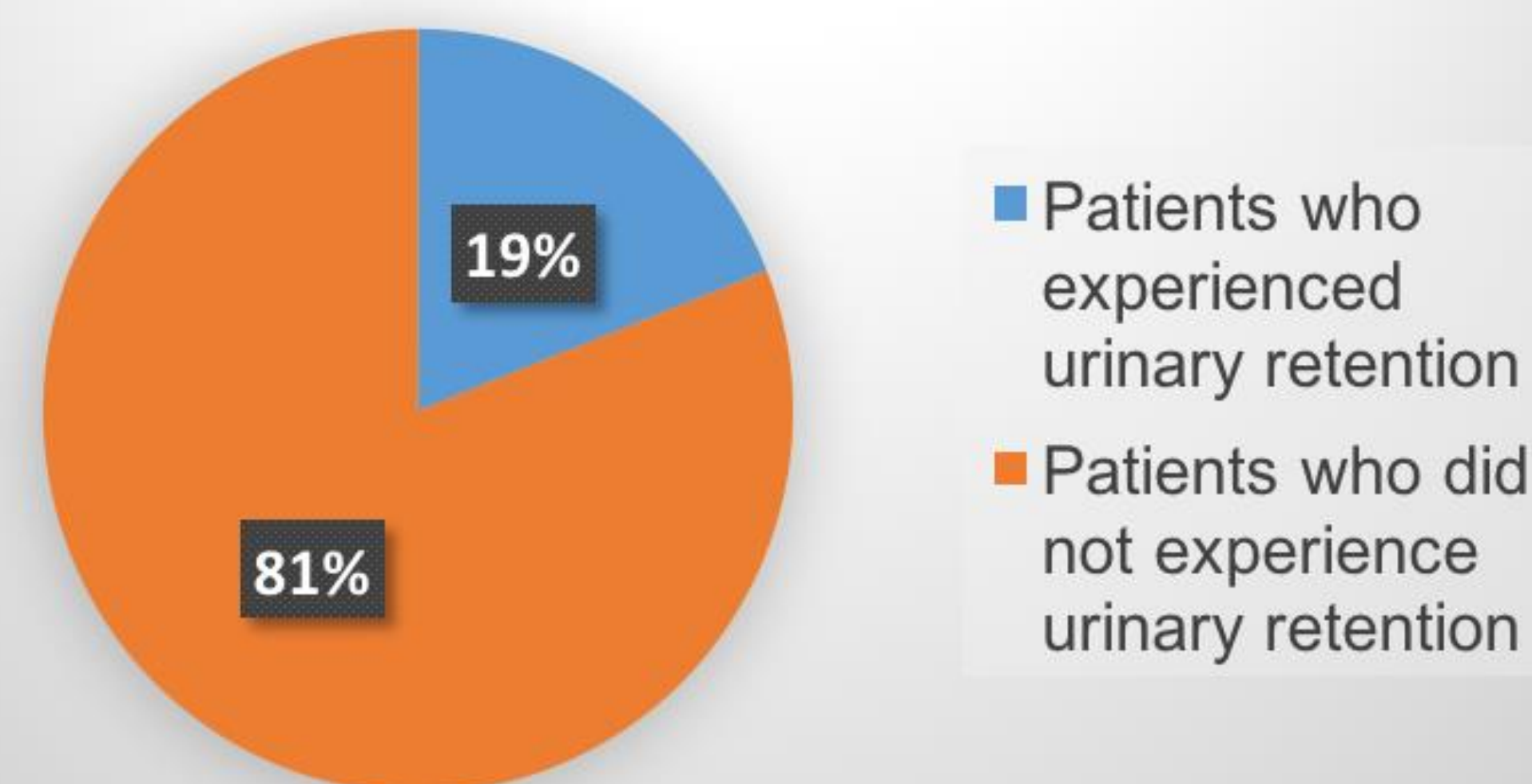
Implementation

- Nursing staff was educated in person at huddles and electronically on the protocol and was involved in collecting pre-data and post-data
- Patients who experienced urinary retention while wearing a scopolamine patch were recorded
- For post-data collection, an order was obtained from the provider to remove the scopolamine patch after 8 hours of urinary retention in hopes of eliminating the need for further catheterizations
- Data was reviewed for effectiveness of intervention

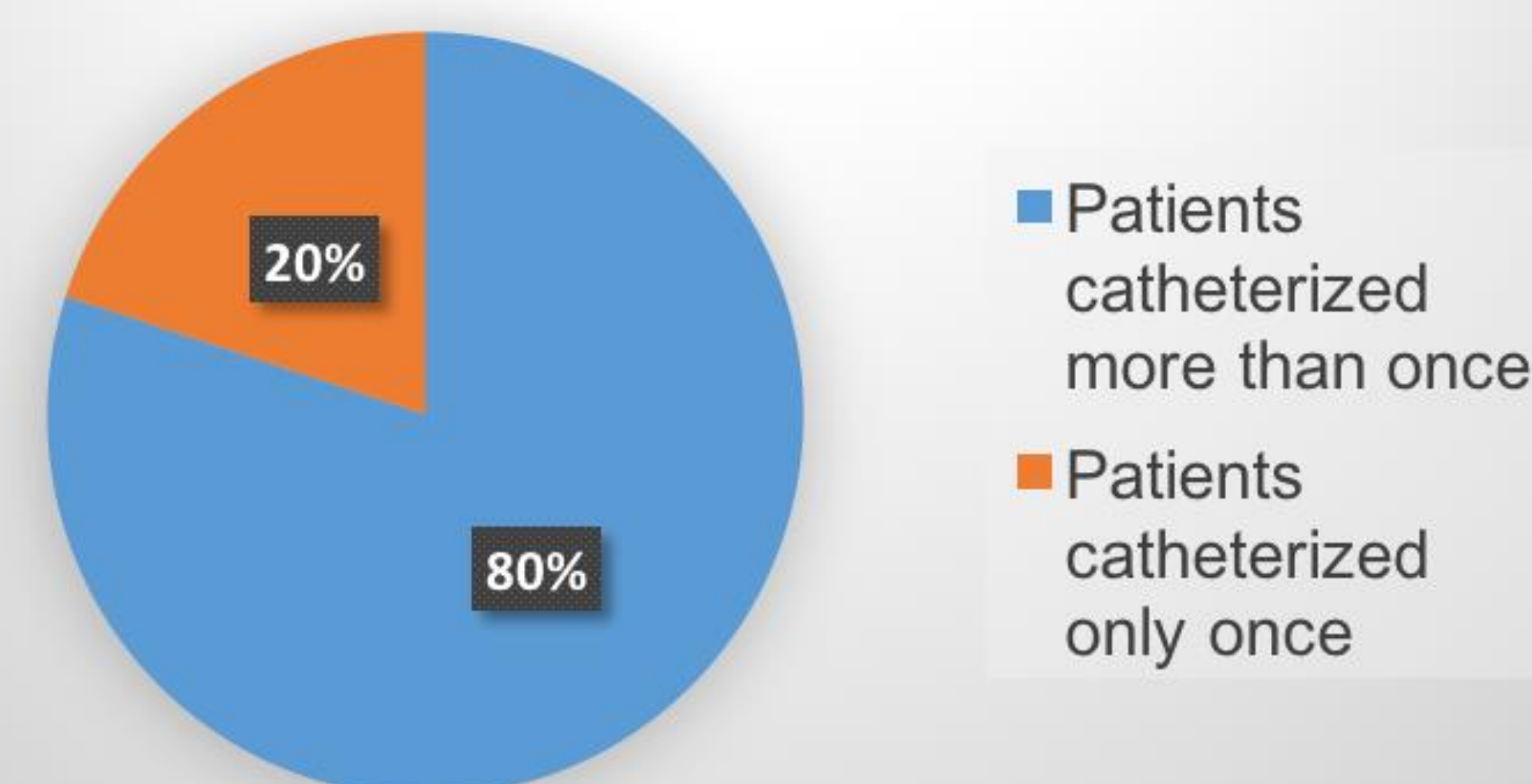
Pre-data

Sample size of patients was 55. 10/55 experienced urinary retention

Percentage of Urinary Retention



Number of Catheterizations Required



Outcomes

Only one patient had experienced post-operative urinary retention while wearing a scopolamine patch. The patient was catheterized once and the patch was then removed 15 hours post-operatively. The patient was then able to urinate spontaneously and avoid any additional catheterizations. Patient had orders received for removal 5 hours after catheterization.

Barriers

- Limited sample size for post-data
- Fewer patches were used perioperatively during post-data collection

References

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**More references available upon request

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